

OXIDE-SEMICONDUCTOR LIGHT EMITTING ELEMENT

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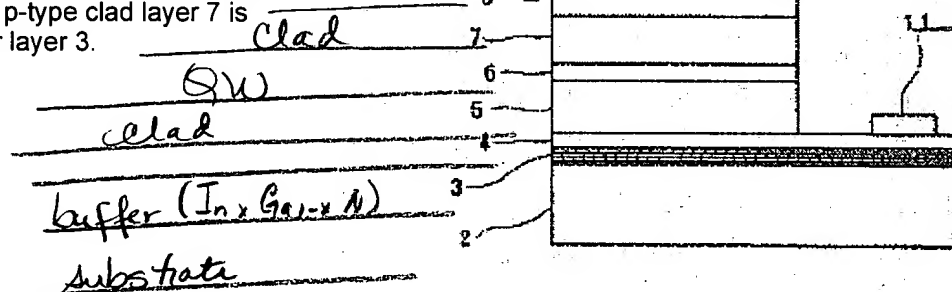
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Abstract of JP2004235492

PROBLEM TO BE SOLVED: To provide an oxide-semiconductor light emitting element wherein the lattice strain of a ZnO-based semiconductor layer subjected to an epitaxial growth on a substrate is reduced, and it has a high reliability and light emitting efficiency.

SOLUTION: In the oxide-semiconductor light emitting element 1, a buffer layer 3 which includes at least $\text{In}_x\text{Ga}_{1-x}\text{N}$ and has a superlattice structure is formed on a sapphire substrate 2, and a ZnO-based semiconductor layer which comprises at least an n-type clad layer 5, a quantum-well light emitting layer 6 (active layer), and a p-type clad layer 7 is formed on the buffer layer 3.



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